

Coolant Distribution Unit

CDU-22400W



Engineered for ultra-high-density cold-plate liquid-cooled servers, the **CDU-22400W** Cabinet-Type Coolant Distribution Unit offers a modular, energy-efficient design. Suitable for medium and large liquid-cooled data centers, it can be deployed as a standalone unit or integrated into a scalable liquid-cooling micro-module.

Overview

Compatible with liquid cooling & high-density data centers, supports multi-scenario deployment/maintenance, fits AI/HPC transformation; fully modular, redundant components, uninterrupted cooling during faults.

Full-Scenario Adaptability

It features a wider liquid supply temperature range, capable of meeting liquid supply needs from 15°C to 55°C. It is compatible with various types of servers, pipeline layouts, and secondary-side pipelines that support both top and bottom piping designs, making it suitable for all kinds of high-density data centers.

High Aesthetics

Elephant-inspired design: It boasts smooth lines and balanced proportions, combining approachability with unique recognition.

High Availability

With an optimized structure, it has external dimensions of 1300mm (Width) × 900mm (Depth) × 2200mm (Height). Its smaller size saves data center space; it maximizes pipeline maintenance space to shorten O&M (Operations and Maintenance) time, while featuring a compact structure for easy operation.

High Efficiency

High-efficiency plate heat exchangers enhance heat exchange efficiency, with an approach temperature as low as 2.8K. While reducing the secondary-side liquid supply temperature, they maximize the primary-side inlet water temperature, enabling effective utilization of natural cold sources and lowering construction and operation costs (delivering both energy efficiency and cost-effectiveness).

High Quality

It uses components from globally leading brands, and the entire unit holds CE/UL certifications. Its stability and quality have gained global recognition.

Features

- Efficient Heat Transfer
- Lower Approach Temperature
- Full-Scenario Adaptability
- Easy Maintenance
- High Quality
- Wide On-Load Range
- Precise Control
- Fully Functional
- Ultra-Low Energy Consumption
- High Density Deployment
- Support Year-Round Natural Cooling

CDU performance parameters

Model	CDU-22400W
Dimension (H x W x D)	2200mm x 1250mm x 900mm
Rated Heat Transfer	2400kW
Rated Voltage	380VAC-415VAC, 50HZ/60HZ
CDU Weight	Net Weight: 1800kg; Operational Weight: 2000kg
Rated Power	22kw
Human Machine Interface (HMI)	10" Touch Screen
Communication Protocol	Standard: RS485, Modbus RTU; Optional RJ45 (Ethernet), Modbus-TCP
Operating Temperature	0 - 40°C
Operating Relative Humidity	5% - 85% RH

Secondary Side Parameters

Pump	2 pumps (No Redundancy)
Coolant	PG25 (Optional deionized water)
Rated Liquid Supply/ Return Temperature	40/60°C
Rated Flow Rate	108m³/h (PG25)
External Export Capacity	25m
Connection Pipe Diameter	DN100
Connection Method	Chuck interface, with optional flange interface
Rated System Pressure	10bar
Filter	50µm, with optional 25µm
Make Up Water Tank	36L

Primary Side Parameters

Coolant	Softened water
Rated Liquid Supply/ Return Temperature	34/54 °C
Flow rate	108m³/h (water)
Filter	270µm
Rated System Pressure	10bar
Pressure Lost	1.5bar
Connection Pipe Diameter	DN100
Connection Method	Chuck interface, with optional flange interface